UK NEQAS for Leucocyte Immunophenotyping

Leukaemia Immunophenotyping (Part 1) Programme

Sample - 141505

All Participant Report

Distribution - 141505 Closing Date - 06 February 2015 Participant ID - 42981

Date Issued - 19 January 2015

Trial Comments

This sample was issued to 296 participants in LI programme.

Sample Comments

The sample was manufactured by UK NEQAS using a sample of blood from a leukaemia patient which was stabilised and added to a stabilised unit of whole blood.

Results and Performance

Overall Performance Grade (Core Antigens Only)	Performance Status for this Sample	Performance Status Classification Over 6 Sample Period	
		Satisfactory (Grades A-C)	Critical (Grades D-G)
G	Critical	5	1

Please note performance monitoring for this programme is semi-qualitative and is based on the overall performance grade obtained from the consensus immunophenotype on the core antigens. The robust statistics and z-scores provided below are related to technical performance on individual antigens and are not used for performance monitoring. Derivation of z-scores requires normally distributed data and the results for this programme vary between normal and abnormal distribution based on the antigens and on a sample to sample basis. Therefore z-scores for antigens with expressions at the extremes of the results scale (around 0% and 100%) may not truly reflect the performance of the antigen and all z-scores should be viewed as for information purposes only.

Antigen	Your Results (%)	Your Result Antigen Expression (Positive/Negative)	Consensus Antigen Expression (Positive/Negative)	Robust Mean (%)	Robust SD (%)
CD2			-	1.45	1.65
CD3			-	1.49	1.66
CD5			+	93.92	5.40
CD13			-	0.01	0.01
CD19			+	95.26	5.22
CD20			+	46.88	41.72
CD10			-	0.00	0.00
CD79b			-	4.51	4.50
CD103			-	0.00	0.00
CD34			-	0.00	0.00
CD38			+	88.73	10.37
CD43			+	96.27	2.71
CD200			+	86.88	12.62
CD5/CD19 dual positive			+	87.51	11.90
CD22			-	19.99	20.55
CD23			+	59.82	33.91
FMC7			-	0.97	1.24
CD11c			+	35.79	31.26
CD25			-	0.00	0.00
CD45			+	100.00	0.00
HLADR			+	81.68	14.37

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Antigen	z Score*	Performance Status for this Sample	Performance Status Classification Over 6 Sample Period		
			Satisfactory	Action	Critical
CD2		Action	0	1	0
CD3		Action	0	1	0
CD5		Action	0	1	0
CD13		Action	0	1	0
CD19		Action	0	1	0
CD20		Action	0	1	0
CD10		Action			
CD79b		Action			
CD103		Action			
CD34		Action			
CD38		Action			
CD43		Action			
CD200		Action			
CD5/CD19 dual positive		Action			
CD22		Action			
CD23		Action			
FMC7		Action			
CD11c		Action			
CD25		Action			
CD45		Action			
HLADR		Action			

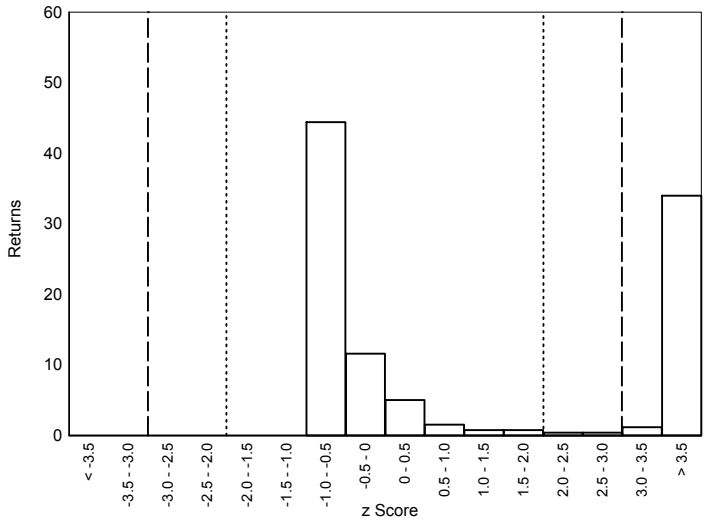
***z Score Limits Definitions**

Please note the scale below is applicable to the tables above and to the z score histograms and Shewhart control charts that follow. It is not applicable to the Cusum control charts.

Histograms of Participant z Scores

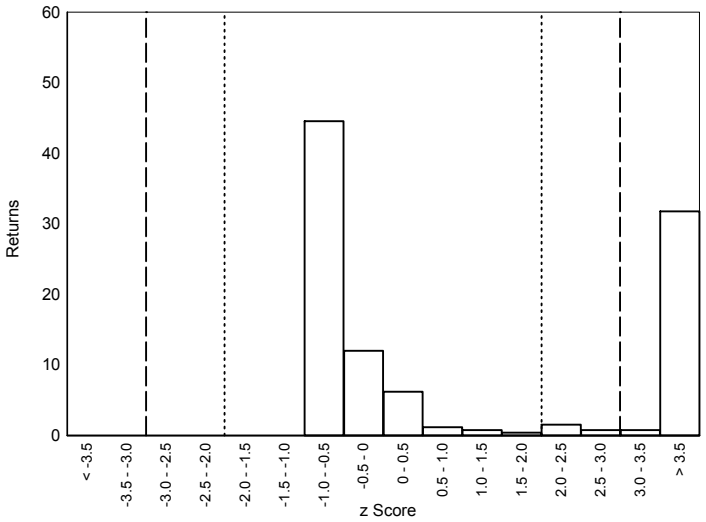
Percentage Values (%) - CD3

Please note ▼ denotes your result



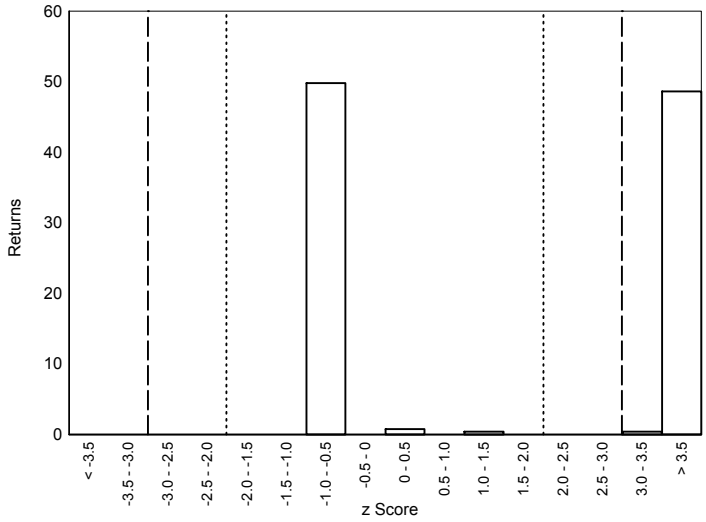
Percentage Values (%) - CD2

Please note ▼ denotes your result



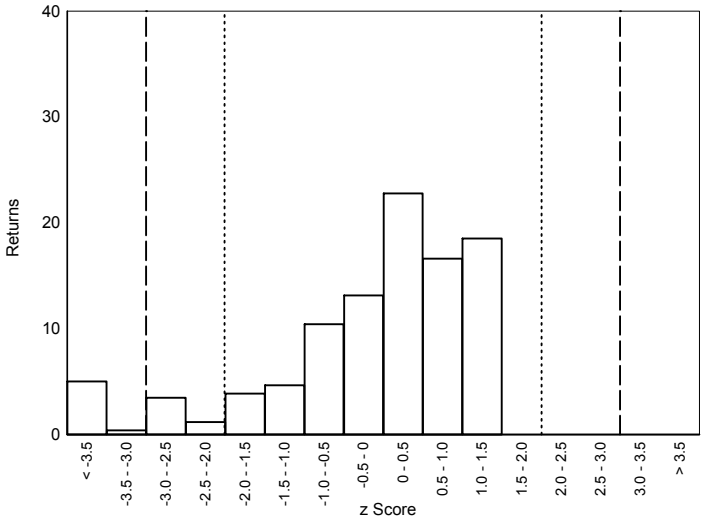
Percentage Values (%) - CD13

Please note ▼ denotes your result



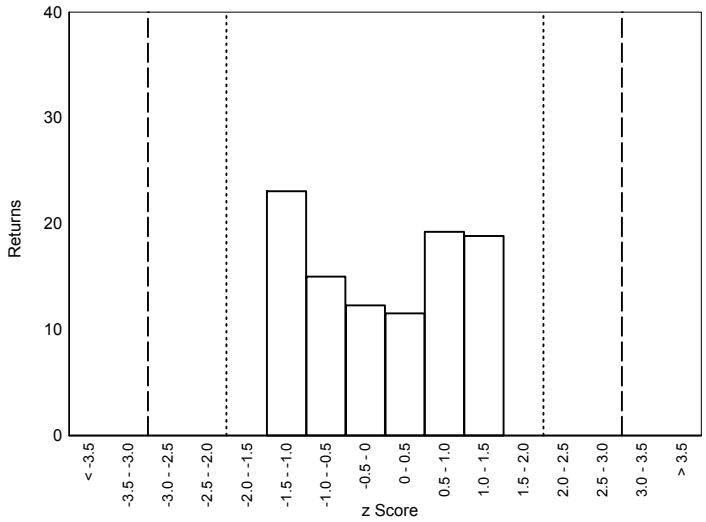
Percentage Values (%) - CD5

Please note ▼ denotes your result



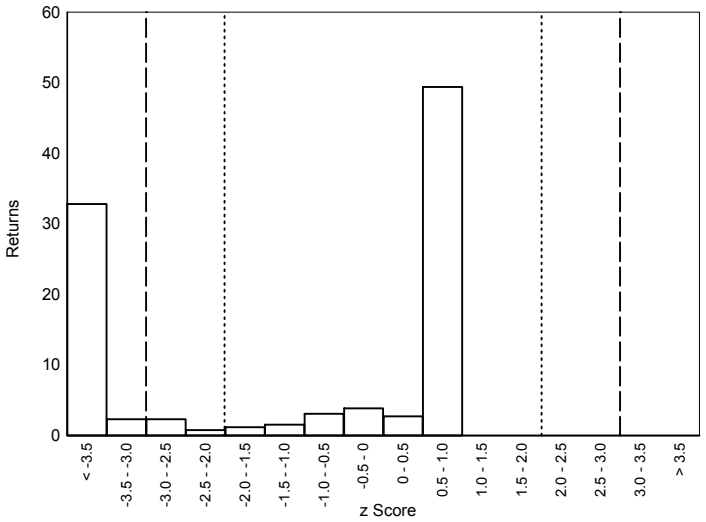
Percentage Values (%) - CD20

Please note ▼ denotes your result



Percentage Values (%) - CD19

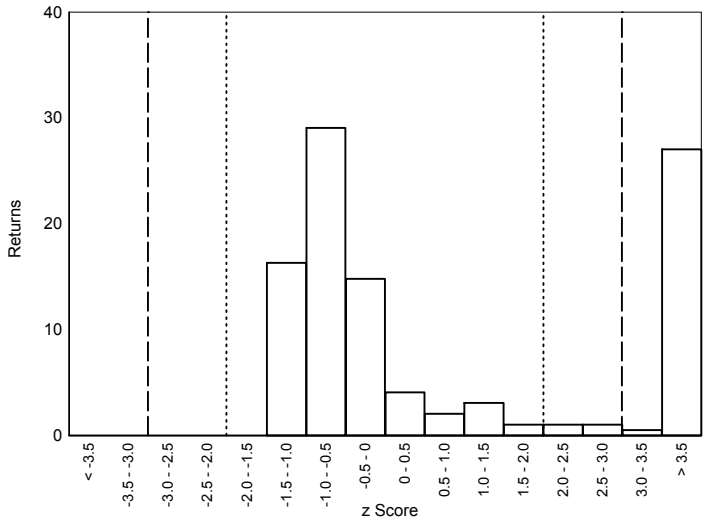
Please note ▼ denotes your result



Histograms of Participant z Scores

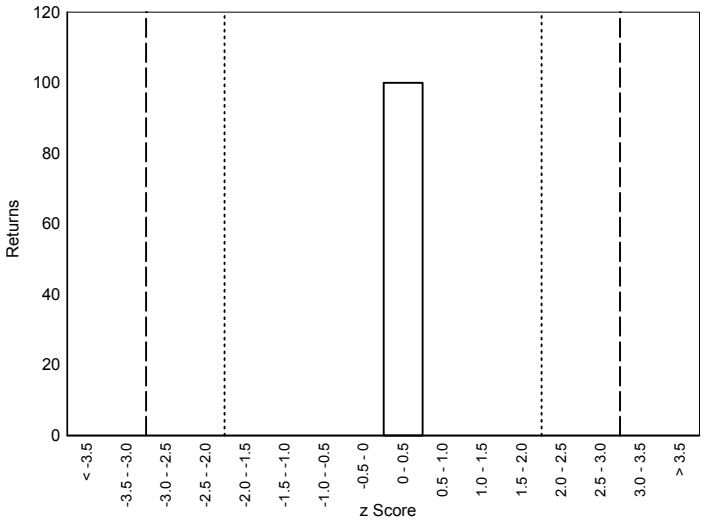
Percentage Values (%) - CD79b

Please note ▼ denotes your result



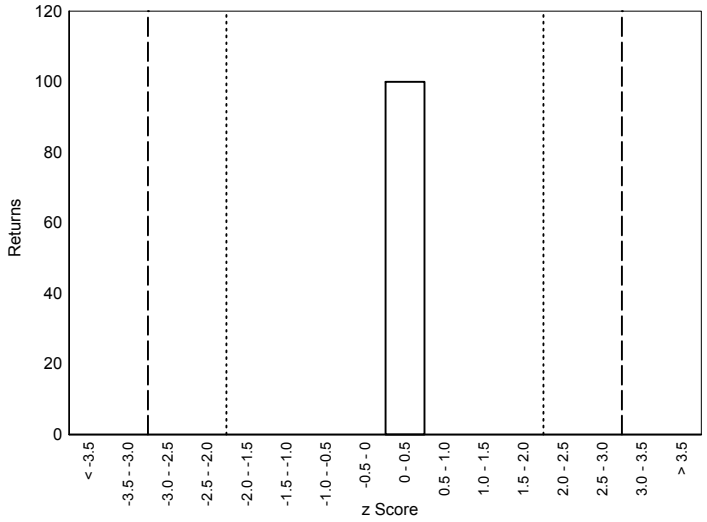
Percentage Values (%) - CD10

Please note ▼ denotes your result



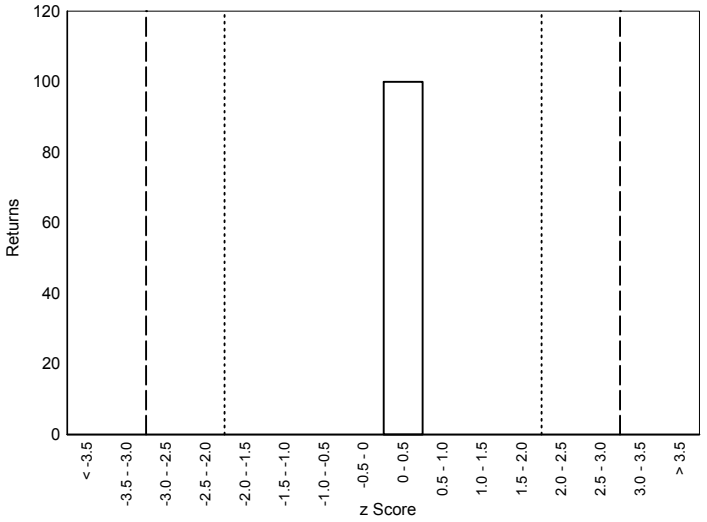
Percentage Values (%) - CD34

Please note ▼ denotes your result



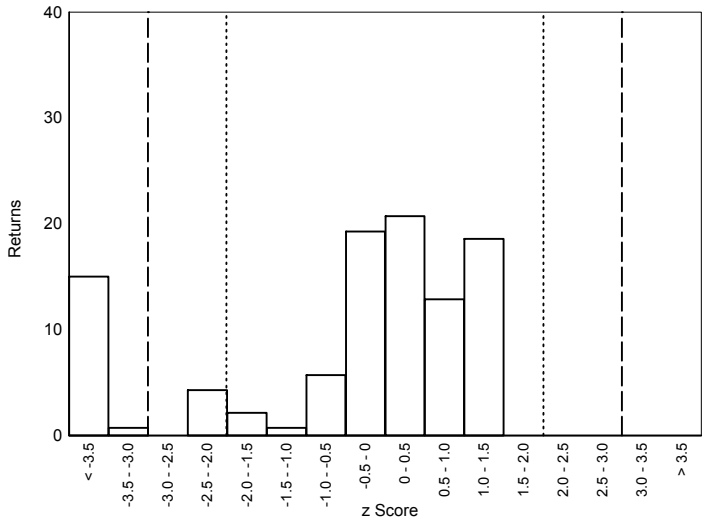
Percentage Values (%) - CD103

Please note ▼ denotes your result



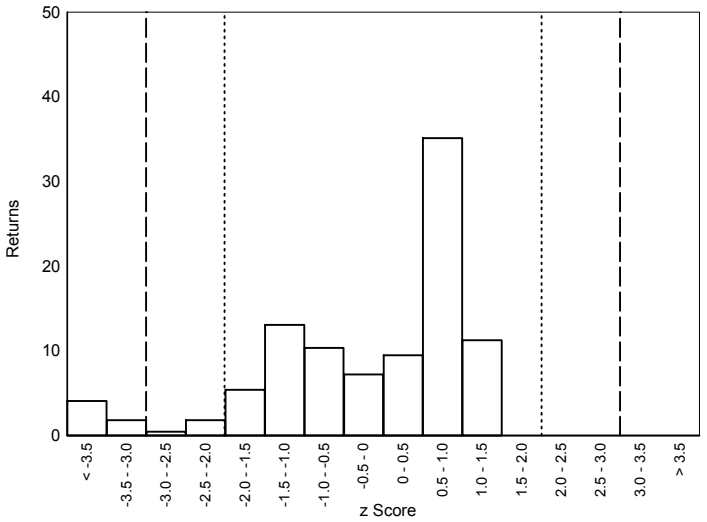
Percentage Values (%) - CD43

Please note ▼ denotes your result



Percentage Values (%) - CD38

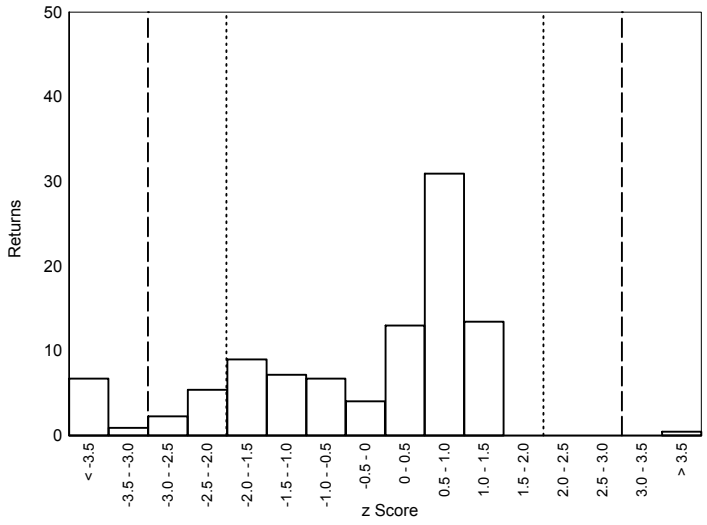
Please note ▼ denotes your result



Histograms of Participant z Scores

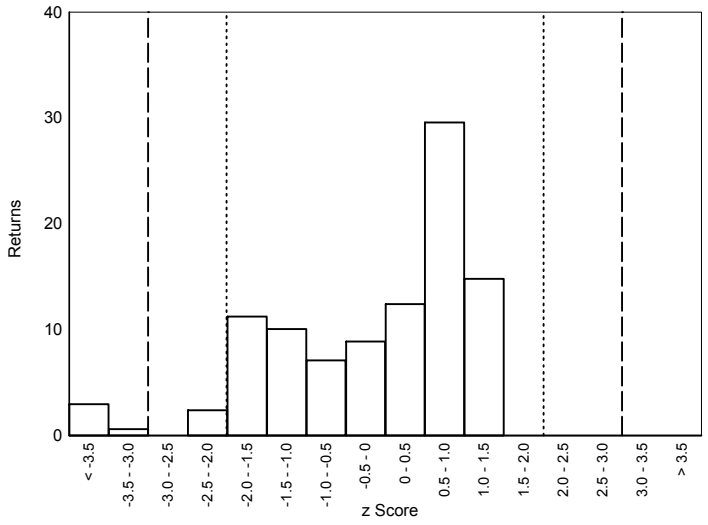
Percentage Values (%) - CD5/CD19 dual positive

Please note ▼ denotes your result



Percentage Values (%) - CD200

Please note ▼ denotes your result



Shewhart Control Charts

(Please note each data point represents a single sample)

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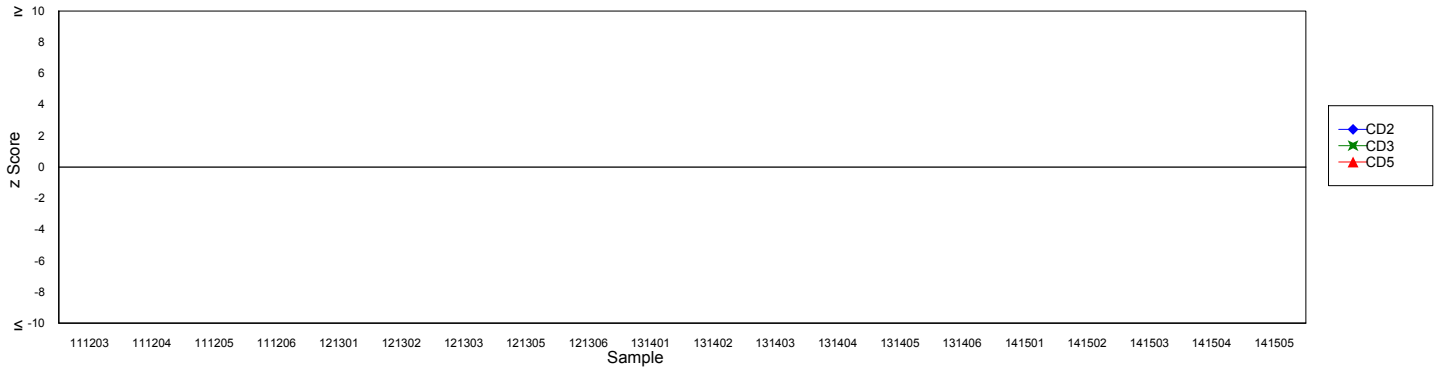
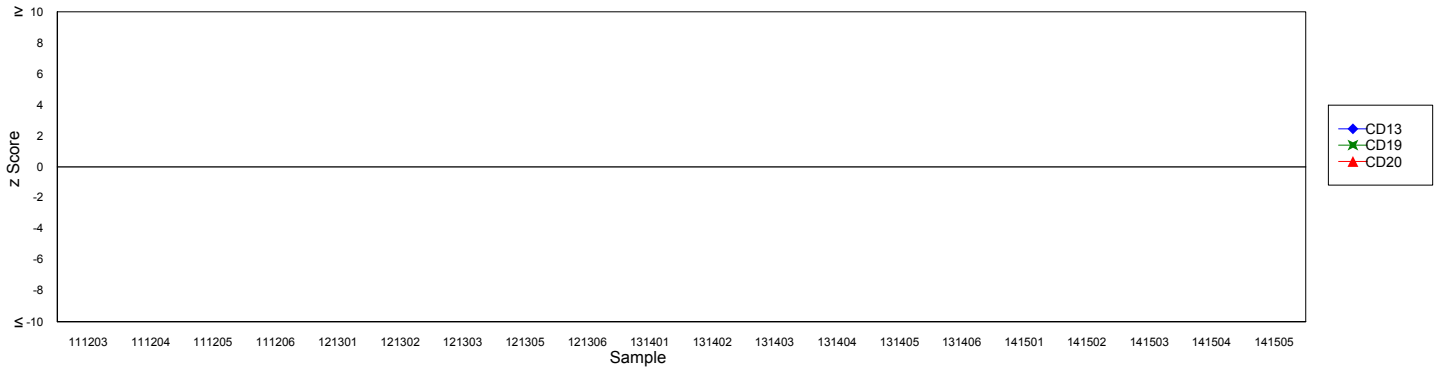
Cusum Control Charts

(Please note each data point represents the sum of the z scores of the current sample and the two previous samples)

Percentage Values (%)



Percentage Values (%)



Antibody Manufacturer Specific Statistics

(Please note only groups of >20 returns are displayed)

CD2	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	130	0.5	0.5
Beckman Coulter	89	3.2	3.3

CD3	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	129	0.5	0.5
Beckman Coulter	95	3.2	3.4

CD5	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	130	94.3	5.5
Beckman Coulter	91	94.3	4.9

CD10	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	107	0.0	0.0
Beckman Coulter	96	0.0	0.0

CD13	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	134	0.0	0.0
Beckman Coulter	88	0.1	0.2

CD19	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	104	94.8	5.9
Beckman Coulter	114	96.9	3.4

CD23	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	25	60.3	34.8
Beckman Coulter	26	67.5	28.8

CD79b	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	102	2.6	2.5
Beckman Coulter	49	20.9	19.9
Dako	23	1.2	1.5

Antibody Manufacturer Specific Statistics

(Please note only groups of >20 returns are displayed)

FMC7	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
Beckman Coulter	20	1.3	1.5

CD103	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	98	0.0	0.0
Beckman Coulter	61	0.1	0.1
Dako	24	0.0	0.0

CD34	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	132	0.0	0.0
Beckman Coulter	75	0.0	0.0

CD20	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	125	51.4	41.8
Beckman Coulter	87	41.0	41.6

CD38	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	114	86.0	12.9
Beckman Coulter	72	92.3	6.9

CD43	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	63	95.9	3.3
Beckman Coulter	42	96.2	2.9

CD200	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	84	85.5	13.8
eBioscience	32	94.9	5.2

CD5/CD19 dual positive	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
BD Biosciences	109	87.4	12.1
Beckman Coulter	75	89.3	10.3

Antibody Fluorochrome Specific Statistics

(Please note only groups of >20 returns are displayed)

CD2	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	33	1.5	1.6
FITC	108	0.5	0.5
PE	51	1.4	1.6
PE-CY7	43	3.0	3.2

CD3	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	28	0.6	0.7
ECD	20	13.6	12.5
FITC	45	1.5	1.7
PE	32	7.6	8.6
PE-CY5	21	8.2	9.2

CD5	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	35	94.7	4.6
FITC	65	91.2	6.2
PE	36	94.7	4.3
PE-CY7	32	95.2	4.2
PerCP-CY5.5	34	96.2	4.0

CD10	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	36	0.0	0.0
FITC	34	0.0	0.0
PE	96	0.0	0.0
PE-CY7	42	0.0	0.0

CD13	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
PE	172	0.2	0.2
PE-CY7	20	0.0	0.0

CD19	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	32	94.3	6.6
ECD	30	91.9	8.9
PE	37	78.0	20.4
PE-CY7	77	99.8	0.2

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Antibody Fluorochrome Specific Statistics

(Please note only groups of >20 returns are displayed)

CD23	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
PE	42	68.8	27.4

CD79b	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	37	4.8	4.5
FITC	45	1.3	1.4
PE	80	11.6	11.4

FMC7	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
FITC	45	0.8	1.0

CD103	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
FITC	174	0.0	0.0
PE	23	0.0	0.0

CD34	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	42	0.0	0.0
FITC	23	0.0	0.0
PE	63	0.0	0.0
PE-CY7	23	0.0	0.0
PerCP-CY5.5	24	0.0	0.0

CD20	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	27	69.5	27.3
FITC	59	20.6	19.3
Pacific Orange	20	55.4	43.6
PC5.5	23	59.6	41.3
PE	36	45.8	37.0

CD38	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	33	89.0	10.3
FITC	42	82.6	15.9
PE	38	92.0	7.6
PE-CY5	24	92.4	6.6
PE-CY7	28	85.6	11.4

UKNEQAS for Leucocyte Immunophenotyping

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Antibody Fluorochrome Specific Statistics

(Please note only groups of >20 returns are displayed)

CD43	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
Alexa 750	23	96.7	2.8
FITC	73	95.6	3.2

CD200	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	47	94.2	5.6
PE	85	82.5	16.1

CD5/CD19 dual positive	Percentage Values (%)		
Method	Returns	Robust Mean	Robust SD
APC	23	88.8	10.3
FITC	39	77.9	20.3
PE	52	81.7	16.2
PE-CY7	35	89.2	9.7

Information with respect to compliance with standards BS EN ISO/IEC 17043:2010

4.8.2 a) The proficiency testing provider for this programme is:
UK NEQAS for Leucocyte Immunophenotyping
Pegasus House, 4th Floor Suite
463A Glossop Road
Sheffield, S10 2QD
United Kingdom
Tel: +44 (0) 114 267 3600, Fax: +44 (0) 114 267 3601
e-mail: nicola.rose@ukneqasli.co.uk

4.8.2 b) The coordinators of UK NEQAS LI programmes are Prof David Barnett and Mr Liam Whitby.

4.8.2 c) Person(s) authorizing this report:
Prof David Barnett, Director or Mr Liam Whitby, Operations Manager of UK NEQAS LI

4.8.2 d) No activities in relation to this EQA exercise were subcontracted.

4.8.2 g) The UK NEQAS LI Confidentiality Policy can be found in the Quality Manual which is available by contacting the UK NEQAS LI office. Participant details, their results and their performance data remain confidential unless revealed to the relevant NQAAP when a UK participant is identified as having performance issues.

4.8.2 i) All EQA samples are prepared in accordance with strict Standard Operational Procedures by trained personnel proven to ensure homogeneity and stability. Where appropriate/possible EQA samples are tested prior to issue. Where the sample(s) issued is stabilised blood or platelets, pre and post stability testing will have proved sample suitability prior to issue.

4.8.2 l), n), o), r) & s) Please refer to the UK NEQAS LI website at www.ukneqasli.co.uk for detailed information on each programme including the scoring systems applied to assess performance. Where a scoring system refers to the 'consensus result' this means the result reported by the majority of participants for that trial issue. Advice on the interpretation of statistical analyses and the criteria on which performance is measured is also given. Please note that where different methods/procedures are used by different groups of participants these may be displayed within your report, but the same scoring system is applied to all participants irrespective of method/procedure used.

4.8.2 m) We do not assign values against reference materials or calibrants.

4.8.2 q) Details of the programme designs as authorized by The Steering Committee and Specialist Advisory Group can be found on our website at www.ukneqasli.co.uk. The proposed trial issue schedule for each programme is also available.

4.8.2 t) If you would like to discuss the outcomes of this trial issue, please contact UK NEQAS LI using the contact details provided.